

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016399**Date Inspected:** 13-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Le Zhi Jiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 6

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 06396 to perform Magnetic particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic particle Test report for this date. The member is identified as Side Panel and Intermediate Web panel. The weld tested is identified as follows:

(FB4100-001-001,002,003,004,005,006)

(SP3086-001-007,008,009,010,011,012)

(FB4099-001-001,002,003,004,005,006,007,008)

(FB4103-001-001,002,003,004,005,006)

(FB4105-001-001,002,003,004,005,006,007,008)

This QA Inspector randomly observed the following work in progress:

OBG # BAY 6

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) member identified as SP3089-001. Distortion

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Huang Min was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) number HSR1 (B) 8941.

This QA observed ZPMC Magnetic particle Testing (MT) technician perform MT of Intermediate Web Panel on various weld joints. See attached pictures.

OBG # BAY 7

This QA observed ZPMC qualified welding personnel identified as 062447 perform Flux Cored Arc Welding (FCAW) Process on weld joint SP3140-001-081,082,091,092. ZPMC Quality Control Personnel (QC) identified as Mr. Guo pan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as 062447 perform Flux Cored Arc Welding (FCAW) Process on weld joint SP3132-001-021,022. ZPMC Quality Control Personnel (QC) identified as Mr. Guo pan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

As mention above

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Sukanthan,Dhanasingh

Quality Assurance Inspector

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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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**Reviewed By:** Hall,Steven

QA Reviewer